

Claims

1. A method of marking by a staining agent microorganisms or cells contained in a sample and detecting the same by measuring image, comprising:
 - 1) a step of capturing said microorganisms or cells contained in said sample on the adhesive layer of a collection sheet composed of a substrate layer having a focusing marker for autofocusing at least on its surface and an adhesive layer having a predetermined thickness deposited on the surface of this substrate layer,
 - 2) A step of staining said captured microorganisms or cells by a staining reagent,
 - 3) A step of autofocusing said focusing marker ,
 - 4) A step of moving at least one of the light receiving optical system for image measurement or the collection sheet relatively by the equivalent distance to the value of said predetermined thickness of the adhesive layer from the focusing position by said autofocusing as a reference point to bring said microorganisms or cells on the adhesive layer into focus, and
 - 5) A step of radiating light on the surface of said adhesive layer that had been brought into focus and detecting the microorganisms or cells by measuring image.
2. The method of detecting microorganisms or cells according to claim 1 comprising the following steps in place of said steps 1) and 2).
 - 1) A step of staining said microorganisms or cells contained in said sample in advance by a staining reagent, and
 - 2) A step of capturing said microorganisms or cells contained in the sample stained in advance by a staining reagent on said adhesive layer of a collection sheet comprising a substrate layer having a focusing marker for autofocusing at least on its surface and an adhesive layer having a predetermined thickness deposited on the surface of this substrate layer.
3. The method of detecting microorganisms or cells according to claim 1 or claim 2, wherein said staining reagent is a fluorescent reagent, an excitation light is radiated onto the surface of said adhesive layer to measure fluorescent image, and the radiation light for autofocusing when said focusing marker is automatically brought into focus is a light that includes a wavelength of the optical wavelength band for said fluorescent light image measuring.

4. The method of detecting microorganisms or cells according to any one of claims 1 to 3, wherein said adhesive layer comprises a non-water soluble adhesive.
5. The method of detecting microorganisms or cells according to any one of claims 1 to 4, wherein the value of the predetermined thickness of said adhesive layer is greater than the depth of field of the optical system.
6. The method of detecting microorganisms or cells according to any one of claims 1 to 5, wherein said focusing marker is provided “on the back of the substrate layer or within the substrate layer” in place of said “on the surface of the substrate layer,” and “ moving by a distance equivalent to the distance obtained by adding the value of distance from the surface of the substrate layer to the position of the focusing marker to the value of the predetermined thickness of the adhesive layer” in place of “ moving by an equivalent distance to the value of said predetermined thickness of the adhesive layer” in said step 4).